## AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

## Listing of Claims:

1. (Currently Amended) A method for therapeutic treatment of a colon cancer which comprises administering an effective amount of An antitumor agent comprising a thiadiazoline derivative compound represented by the general formula (I), or a pharmacologically acceptable salt thereof as an active ingredient:

$$\begin{array}{c}
R^{2} \\
R^{3} & N-N \\
R^{4} & Z & R^{1}
\end{array}$$

<wherein

Z represents a sulfur atom; or S(=0),

R<sup>1</sup> represents substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted phenyl; aryl, a substituted or unsubstituted aromatic heterocyclic group, or -C(=W)R<sup>5</sup> (wherein W represents an oxygen atom or a sulfur atom, and R<sup>5</sup> represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl,

-YR<sup>6</sup> (wherein Y represents an oxygen atom or a sulfur atom, and R<sup>6</sup> represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl,

substituted or unsubstituted lower alkynyl, substituted or unsubstituted eycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group), or -NR<sup>2</sup>R<sup>8</sup> [wherein R<sup>2</sup> and R<sup>8</sup> are the same or different, and represent a hydrogen atom, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted eycloalkyl, substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, -OR<sup>9</sup> (wherein R<sup>9</sup> has the same meaning as that of the aforementioned R<sup>6</sup>), or -NR<sup>10</sup>R<sup>11</sup> (wherein R<sup>10</sup> and R<sup>11</sup> are the same or different, and represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkyl, substituted or unsubstituted eycloalkyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted eycloalkyl, substituted heterocyclic group, or R<sup>10</sup> and R<sup>11</sup> are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group), or R<sup>2</sup> and R<sup>8</sup> are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group),

a hydrogen atom,

substituted or unsubstituted lower alkyl, or

-C(=W<sup>1</sup>)R<sup>12</sup> [wherein W<sup>1</sup> represents an oxygen atom or a sulfur atom, R<sup>12</sup> represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted explosible arguments, substituted or unsubstituted arguments, a substituted or unsubstituted heterocyclic group, -Y<sup>1</sup>R<sup>13</sup> (wherein Y<sup>1</sup> represents an oxygen atom or a sulfur atom, and R<sup>13</sup> represents substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkyl, substituted or unsubstituted companies.

ycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group), or -NR<sup>14</sup>R<sup>15</sup> (wherein R<sup>14</sup> and R<sup>15</sup> are the same or different, and represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group, or R<sup>14</sup> and R<sup>15</sup> are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group)]; group)];

R<sup>3</sup> represents a hydrogen atom, substituted or unsubstituted lower alkyl; substituted or unsubstituted lower alkynyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group, and

R<sup>4</sup> represents substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted or unsubstituted or unsubstituted or unsubstituted or unsubstituted phenyl aryl, or a substituted or unsubstituted heterocyclic group, or R<sup>3</sup> and R<sup>4</sup> are combined together to represent

-(CR<sup>16A</sup>R<sup>16B</sup>)<sub>m1</sub>-Q (CR<sup>16C</sup>R<sup>16D</sup>)<sub>m2</sub>- {wherein Q represents a single bond, substituted or unsubstituted phenylene, or cycloalkylene, m1 and m2 are the same or different, and each represents an integer of 0 to 4, with the proviso that m1 and m2 are not 0 at the same time,

R<sup>16A</sup>, R<sup>16B</sup>, R<sup>16C</sup> and R<sup>16D</sup> are the same or different, and represent a hydrogen atom, halogen, substituted or unsubstituted lower alkyl, -OR<sup>17</sup> [wherein R<sup>17</sup>-represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted or

aryl, a substituted or unsubstituted heterocyclic group, CONR<sup>18</sup>R<sup>19</sup> (wherein R<sup>18</sup> and R<sup>19</sup> are the same or different, and represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted eycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group, or R<sup>18</sup> and R<sup>19</sup> are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group).

-SO<sub>2</sub>NR<sup>20</sup>R<sup>21</sup> (wherein R<sup>20</sup> and R<sup>21</sup> have the same meanings as those of the aforementioned R<sup>18</sup> and R<sup>19</sup>, respectively), or -COR<sup>22</sup> (wherein R<sup>22</sup> represents a hydrogen atom, substituted or unsubstituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted eycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group)],

NR<sup>23</sup>R<sup>24</sup> [wherein R<sup>23</sup> and R<sup>24</sup> are the same or different, and represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, COR<sup>25</sup> (wherein R<sup>25</sup> represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted eyeloalkyl, substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, substituted or unsubstituted lower alkoxy, substituted or unsubstituted aryloxy, amino, substituted or unsubstituted lower alkylamino, or substituted or unsubstituted lower alkylamino, or substituted or unsubstituted arylamino), or SO<sub>2</sub>R<sup>26</sup> (wherein R<sup>26</sup> represents substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted aryl, or a

substituted or unsubstituted heterocyclic group), or R<sup>23</sup>-and R<sup>24</sup>-are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group], or -CO<sub>2</sub>R<sup>27</sup> (wherein R<sup>27</sup> represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted or unsu

## 2.- 7. (Cancelled)

- 8. (Currently Amended) The method The antitumor agent according to claim 1, wherein  $R^2$  is a hydrogen atom, substituted or unsubstituted lower alkyl, or  $-C(=W^1)R^{12}$  (wherein  $W^1$  and  $R^{12}$  have the same meanings as those mentioned above, respectively).
- 9. (Currently Amended) The method The antitumor agent according to claim 1, wherein  $R^2$  is  $-C(=W^1)R^{12}$  (wherein  $W^1$  and  $R^{12}$  have the same meanings as those mentioned above, respectively).
- 10. (Currently Amended) The method The antitumor agent according to claim [[8]] 9, wherein R<sup>12</sup> is substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkynyl, or substituted or unsubstituted cycloalkyl.

- 11. (Currently Amended) The method The antitumor agent according to claim [[8]] 9, wherein R<sup>12</sup> is substituted or unsubstituted lower alkyl.
- 12. (Currently Amended) The method The antitumor agent-according to claim [[8]]  $\underline{9}$ , wherein  $R^{12}$  is lower alkyl.
- 13. (Currently Amended) The method The antitumor agent according to claim [[8]]  $\underline{9}$ , wherein  $W^1$  is an oxygen atom.
  - 14. 15. (Cancelled)
- 16. (Currently Amended) An The antitumor agent according to claim 1, wherein R<sup>3</sup> is substituted lower alkyl.
  - 17. 23. (Cancelled)
- 24. (Currently Amended) A <u>compound thiadiazoline derivative</u> represented by the formula (IA) or a pharmacologically acceptable salt thereof:

{wherein

Z has the same meaning as that mentioned above, above;

R<sup>1</sup> has the same meaning as that mentioned above, above;

(A) when  $R^4$  is substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, or  $-C(=W)R^5$  (wherein W and  $R^5$  have the same meanings as those mentioned above, respectively),  $R^{2A}$ ,  $R^{3A}$  and  $R^{4A}$  have the same meanings as those of the aforementioned  $R^2$ ,  $R^3$  and  $R^4$  (with proviso that  $Z^A$  is a sulfur atom,  $R^4$  is benzyl,  $R^{2A}$  is acetyl, one of  $R^3$  and  $R^{4A}$  is methyl, and the other of  $R^3$  and  $R^{4A}$  is not 2-oxopropyl), respectively

(B) when R<sup>4</sup>-is substituted or unsubstituted lower alkynyl, or a substituted or unsubstituted aromatic heterocyclic group, R<sup>2A</sup>-and R<sup>3A</sup>-have the same meanings as those of the aforementioned R<sup>2</sup>-and R<sup>3</sup>, respectively, and R<sup>4A</sup>-represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group, and

(C) when R<sup>1</sup> is substituted or unsubstituted aryl,

 $R^{2A}$  represents  $\underline{-C(=W^1)R^{12}}$   $\underline{-C(=W)R^{12}}$  (wherein  $\underline{W^1}$   $\underline{W}$  and  $R^{12}$  have the same meanings as those mentioned above, respectively), respectively);

 $R^{3A}$  represents

-(CH<sub>2</sub>)<sub>k</sub>NHSO<sub>2</sub>R<sup>3B</sup> [wherein k represents an integer of 1 to 6, and R<sup>3B</sup> represents substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, or -NR<sup>7B</sup>R<sup>8B</sup> (wherein R<sup>7B</sup> and R<sup>8B</sup> have the same meanings as those of the aforementioned R<sup>7</sup> and R<sup>8</sup>, respectively are the same or different, and represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted aryl, a substituted or unsubstituted aryl, a substituted or unsubstituted aryl, a substituted or unsubstituted or unsubstituted aryl, a substituted aryl, a s

substituted or unsubstituted lower alkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group), or -NR<sup>10</sup>R<sup>11</sup> (wherein R<sup>10</sup> and R<sup>11</sup> are the same or different, and represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group, or R<sup>10</sup> and R<sup>11</sup> are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group), or R<sup>7</sup> and R<sup>8</sup> are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group)], -(CH<sub>2</sub>)<sub>k</sub>NR<sup>7C</sup>R<sup>8C</sup> (wherein k has the same meaning as that mentioned above, and R<sup>7C</sup> and R<sup>8C</sup> have the same meanings as those of the aforementioned R<sup>7B</sup> and R<sup>8B</sup> R<sup>7</sup>-and R<sup>8</sup>, respectively), or

-(CH<sub>2</sub>)<sub>k</sub>NHC(=O)R<sup>7D</sup> (wherein k has the same meaning as that mentioned above, and R<sup>7D</sup> has the same meaning as that of the aforementioned  $R^{7B}$ ;  $R^{7}$ ), and  $R^{4A}$  has the same meaning as that of the aforementioned  $R^{4}$ }.

## 25.- 33. (Cancelled)

34. (Currently Amended) The <u>compound thiadiazoline derivative</u> or a pharmacologically acceptable salt thereof according to claim 24, wherein  $R^{2A}$  is  $-C(=O)R^{12}$  (wherein  $R^{12}$  have <u>has</u> the same meanings as those mentioned above).

35. (Currently Amended) The <u>compound thiadiazoline derivative</u> or a pharmacologically acceptable salt thereof according to claim 34, wherein  $R^{12}$  is lower alkyl.

36.- 37. (Cancelled)

38. (Withdrawn - Currently Amended) The <u>compound thiadiazoline derivative</u> or a pharmacologically acceptable salt thereof according to claim 24, wherein  $R^{3A}$  is -  $(CH_2)_k NHSO_2 R^{3B}$  (wherein k and  $R^{3B}$  have the same meanings as those mentioned above, respectively).

39. - 41. (Cancelled)

- 42. (Currently Amended) The <u>compound thiadiazoline derivative</u> or a pharmacologically acceptable salt thereof according to claim 24, wherein  $R^{4A}$  is phenyl.
- 43. (Currently Amended) A medicament comprising the <u>compound thiadiazoline</u> derivative or a pharmacologically acceptable salt thereof according to claim 24 as an active ingredient.

44. - 47. (Cancelled)

- 48. (Currently Amended) A method for inhibiting a mitotic kinesin Eg5 which comprises administering an effective amount of the <u>compound thiadiazoline derivative</u> or a pharmacologically acceptable salt thereof according to claim 1.
  - 49. 50. (Cancelled)
- 51. (Currently Amended) A method for inhibiting a mitotic kinesin Eg5 which comprises administering an effective amount of the <u>compound thiadiazoline derivative</u> or a pharmacologically acceptable salt thereof according to claim 24.
  - 52. (Cancelled)
- 53. (Currently Amended) A method for therapeutic and/or preventive treatment of a colon cancer malignant tumor which comprises administering an effective amount of the compound thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 24.
  - 54. 56. (Cancelled)